



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,639	08/05/2003	Steven J. Leverette	SEAH/505US	7196
22031	7590	02/23/2006	EXAMINER	
NICK A NICHOLS P O BOX 16399 SUGARLAND, TX 774966399			SPAHN, GAY	
			ART UNIT	PAPER NUMBER
			3673	

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/634,639	LEVERETTE ET AL.	
	Examiner	Art Unit	
	Gay Ann Spahn	3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2005 and 22 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 4 and 6-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☒ Claim(s) 1-3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of the species of Figs. 2 and 4 and the species of Fig. 8 in the reply filed on 28 November 2005 is acknowledged.

The examiner notes that Applicants stated that claims 1-6 read on the elected species. However, in the amendment filed on 22 March 2005, claim 5 was canceled. In addition, claim 4 does not read on the elected species of Figs. 2 and 4, but instead reads on the non-elected species of Fig. 7 and claim 6 does not read on the elected species of Fig. 8, but rather on the non-elected species of Fig. 10 (i.e., Fig. 8 does not show the claimed "dashpot" (reference numeral 41), but Fig. 10 does).

Claim 4 and 6-9 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim.

Therefore, the election of species requirement is still deemed proper and is therefore made FINAL. Examination will proceed on claims 1-3.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because:

(1) reference characters "42" (see Fig. 9 - reference numeral "42" is labeled "damping force system" on page 7, lines 8, 10, and 11 of specification) and "41" (see

Fig. 10 - reference numeral "41" has been labeled "dashpot" on page 7, line 13 of the specification) have both been used to designate the box-shaped structure of Figs. 9 and 10.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because:

(1) reference character "28" has been used to designate both "the unidentified structure in Fig. 8" and "the unidentified structure in Fig. 10".

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as

Art Unit: 3673

either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to because:

(1) in all of Figs. 1, 2, 2A, 3, 4, 5, 6, 7, 7A, 8, 9, 10, 11, 11A, 12, and 12A, the arrowheads at the end of the lead lines should be deleted unless in compliance with 37 CFR 1.84(r)(1-3);

(2) in all of Figs. 1, 2, 2A, 3, 4, 5, 6, 7, 7A, 8, 9, 10, 11, the abbreviation "NO." should be deleted;

(3) in Fig. 2, the line and arrow pointing toward Fig. 2A should be deleted because by naming the section line 2A-2A there is already an indication that the cross-sectional view may be found in Fig. 2A, and the lead line leading from reference numeral 24 should extend all the way to the to the black line in the center of the steel tendon (20);

(4) Fig. 2A should be clearly separated from Fig. 2 so that it is clear they are two different figures (i.e., in the original figures, Fig. 2A is situated above seabed (12) so that it is not clear the it is not a part of Fig. 2) and the examiner suggests amending Fig. 2 to shorten the line for the seabed (12) so that it is not under Fig. 2A;

(5) in Fig. 4, the lines and arrowhead leading from the dashed circle and the structure represented by reference numeral 20 and 24 (including the lead lines,

Art Unit: 3673

arrowheads and reference numerals themselves) should be deleted and a dashed line leading from the dashed circle to --2A-- should be inserted to show that the detail view can be found in Fig. 2A;

(6) in Fig. 6, the lines and arrowhead leading from the dashed circle and the structure represented by reference numeral 20 and 24 (including the lead lines, arrowheads and reference numerals themselves) should be deleted and a dashed line leading from the dashed circle to --2A-- should be inserted to show that the detail view can be found in Fig. 2A;

(7) in Fig. 7, the line and arrow pointing toward Fig. 7A should be deleted because by naming the section line 7A-7A there is already an indication that the cross-sectional view may be found in Fig. 7A;

(8) Fig. 7A should be clearly separated from Fig. 7 so that it is clear they are two different figures (i.e., in the original figures, Fig. 7A is situated above seabed (12) and within Fig. 7 so that it is not clear the it is not a part of Fig. 7) and the examiner suggests amending by moving Fig. 7A to a different location so as not to be within Fig. 7;

(9) Figs. 8 and 9 are separate figures and cannot be connected and must be separated;

(10) Figs. 8 and 10, is reference numeral "28" (which is not described in specification) supposed to be reference numeral --29--?; and

(11) in Figs. 11A, 12 and 12A, the "FIGURE 11A", "FIGURE 12", and "FIGURE 12A" must be enlarged because according to 37 CFR 1.84(u)(2), the view numbers must be larger than the numbers used for reference characters.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description:

- (1) reference numeral "28".

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the

Art Unit: 3673

application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

Claim 1-3 are objected to because of the following informalities:

(1) on page 9, line 1, "CLAIMS:" should be changed to --We claim-- or --The invention claimed is:-- or equivalent (see the Manual of Patent Examining Procedure (MPEP) § 608.01(m) entitled "Form of Claims", the third full sentence).

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salama et al. (U.S. Patent No. 4,990,030) in view of Amin et al. (U.S. Patent No. 6,782,950).

As to claim 1, Salama et al. disclose a tendon system (22, 22, 22, 22) for anchoring a floating platform (12) to the seabed (16), comprising:

a tendon array (22, 22, 22, 22) anchoring said platform (12) to the seabed (16), said tendon array (22, 22, 22, 22) including one or more steel tendons (26, 126) and one or more synthetic tendons (34, 134).

However, Salama et al. fail to disclose damping means mounted on said platform for inhibiting platform resonance motions.

Amin et al. disclose damping means mounted on said platform for inhibiting platform resonance motions (see col. 4, lines 39-41, wherein it states that "[b]ilge keels, high drag mooring chains and/or other devices can be added to the hull in order to maximizing [sic] damping.").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the tendon system for anchoring a floating platform to a seabed of Salama et al. by including a damping means mounted on the platform for

Art Unit: 3673

inhibiting platform resonance motions as taught by Amin et al. in order to prevent upheaval of the floating platform.

As to claim 2, Salama et al. in view of Amin et al. disclose the tendon system of claim 1 as discussed above, and Salama et al. also disclose that said synthetic tendons (34) are coaxially located within said steel tendons (26).

As to claim 3, Salama et al. in view of Amin et al. disclose the tendon system of claim 1 as discussed above, and Salama et al. also disclose said synthetic tendons (34, 134) are carbon fiber composite tendons (see col. 3, lines 37-43, wherein it states that the high modulus composite tubular member (34, 134) is preferably high modulus carbon fibers disposed in an epoxy matrix).

Response to Arguments

Applicant's arguments with respect to claims 1-3 have been considered but are moot in view of the new ground of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Various patents cited of interest include: U.S. Patent No. 5,660,233 to Sparks (see col. 6, line 49-53); U.S. Patent No. 6,478,511 to Hudson et al. (see col. 4, lines 16-41); U.S. Patent Application Publication No. 2005/0244231 to Liao et al. (see the last sentence of the Abstract); U.S. Patent No. 6,431,107 to Byle (see claim 13 which recites that "the soft tendon comprises a synthetic rope."); U.S. Patent Application Publication No. 2005/0100414 to Salama (discloses "composite riser string"); U.S. Patent No. 6,022,174 to Husvik et al. (see col. 3, line 65 through col. 4, line 4); and U.S. Patent No. 4,069,682 to Taylor et al. (see claim 16 which recites that "the tendons are of a synthetic material of high strain capability.").

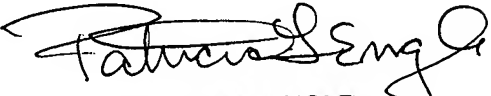
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gay Ann Spahn whose telephone number is (571)-272-7731. The examiner can normally be reached on Monday through Thursday, 8:30 am to 7:00 pm.

Art Unit: 3673

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia L. Engle can be reached on (571)-272-6660. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

^{GAS}
Gay Ann Spahn, Patent Examiner
February 14, 2006


PATRICIA L. ENGLE
PRIMARY EXAMINER
Art Unit 3673
2-21-06